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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/527,399	04/06/2005	Masahiro Kaizu	Q86775	2802
23373	7590	05/25/2006	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			KLAUS, LISA NHUNG	
			ART UNIT	PAPER NUMBER
			2832	

DATE MAILED: 05/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/527,399

Applicant(s)

KAIZU ET AL.

Examiner

Lisa N. Klaus

Art Unit

2832

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1-3, 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Masuda (US 6,683,265).

Masuda discloses a switch comprising:

- the first leaf spring (see the attachment) having conductivity;
- having base fixed relative to a reference surface 12;
- having a plate portion 5 raised in a direction away from the reference surface 12;
- a second leaf spring 9 having conductivity, being formed on a central portion of the plate portion 5 raised in a direction away from the reference surface 12;
- wherein when an external force acting toward the reference surface 12 is applied to the second leaf spring 5, an edge of the central portion comes into contact with the reference surface 12;
- Regarding claim 2, Kawaguchi discloses:
 - the first leaf spring has an angle cross section in a theoretical plane intersecting the reference surface 12;
 - Regarding claim 3, Kawaguchi discloses:

- the first leaf spring (see the attachment) and the second leaf spring 9 are disc springs.

Allowable Subject Matter

2. Claims 4-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance:

The prior art does not teach or suggest a key switch diaphragm comprising:

- Claim 4: at least one raised portion being raised toward the reference surface; when an external force acting toward the reference surface is applied to the second leaf spring, at least the raised portion comes into contact with the reference surface;

- Claim 5: a third leaf spring formed on the second leaf spring raised in a direction away from the reference surface, when an external force acting toward the reference surface is applied to the third leaf spring, an edge of at least the third leaf spring comes into contact with the reference surface;

- Claim 6: an opening formed in the second leaf spring, when an external force acting toward the reference surface is applied to the second leaf spring, an edge of at least the opening comes into contact with the reference surface;

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Conclusion

3. Any inquiry concerning this communication should be directed to Lisa Nhung Klaus whose telephone number is (571)272-1993, and whose fax number is (571)273-8300. In the event that I am not reached, you can contact my supervisor, Mr. Elvin G. Enad at (571)272-1990 or the tech center receptionist at (703) 308-1782.

Lisa Nhung Klaus

Patent Examiner - Art Unit 2832

May 23, 2006

A handwritten signature in black ink, appearing to read "Michael Friedhofer", with a stylized, flowing script.

**MICHAEL FRIEDHOFER
PRIMARY EXAMINER**

